

AD-A225 919

Organizational Behavior in Disasters and Implications for Disaster Planning

DTIC FILE COPY

By Enrico L. Quarantelli, Ph. D.
Director
Disaster Research Center
Ohio State University



DTIC
ELECTE
AUG 24 1990
S B D

National Emergency Training Center
Emmitsburg, Maryland

MONOGRAPH SERIES
1984

Volume 1 Number 2

DISTRIBUTION STATEMENT A

Approved for public release;
Distribution Unlimited

. ABSTRACT

This monograph explores issues surrounding organizational behavior in disasters and its implications for future disaster planning. Emphasized are misconceptions about human and organizational behavior during large- and small-scale disasters, mythological beliefs that weaken disaster plans because they are not based on scientific evidence, and general principles that can be applied to enhance the effectiveness of disaster preparedness planning for natural and technological hazards.

Accession For	
NTIS GRA&I	<input checked="checked" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By <i>perform 50</i>	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
<i>A-1</i>	



PREFACE

Man has lived with natural disasters since before recorded history, and only recently with man-made ones. Although this has been the case, there exist many misconceptions about human and organizational behavior during large- and small-scale disasters. These misconceptions, based on "common sense notions," are poor role models for dealing with disasters. Similarly, a disaster cannot be treated the same way as a smaller emergency.

Disaster planning can be effective, if done properly. A disaster plan, when implemented, will reflect what was put into it. Thus, if such a plan were created based on misconceptions about human and organizational behavior, it would not attain its goal.

To formulate a sound disaster plan, three elements are required. The plan must include a broad range of activities, use an appropriate knowledge base, and recognize the general principles applicable to all disaster types.

This monograph is designed for emergency management professionals having disaster preparedness planning responsibilities at the Federal, State and local levels. It proposes a strategy and theoretical base for developing disaster plans to meet the challenges of present and future hazards.

ORGANIZATIONAL BEHAVIOR IN DISASTERS AND
IMPLICATIONS FOR DISASTER PLANNING

By Enrico L. Quarantelli
Director
Disaster Research Center
Ohio State University

INTRODUCTION

This monograph will explore the relationship between organizational behavior in disasters and its implications for disaster planning. There are several new and old features of both disasters and disaster planning to be explained. In recent times a new category of hazards has been added that has altered the effectiveness of disaster planning strategies used in the past.

Disasters predate any written records of the human race. The stories, legends, and myths of many societies are filled with accounts of catastrophes caused by earthquakes, floods, volcanic eruptions, and other mostly natural events. Even modern societies such as the United States have memorable historical disasters, easily recognized by school children, such as the San Francisco earthquake or the Johnstown flood.

However, there is something new about present-day disasters. To the category of natural hazards (e.g. tornadoes and hurricanes) has been added the relatively new category of technological accidents and mishaps. These are the disasters brought about by human error and the collective mistakes of groups. To the so-called acts of God have been added the acts of men and women.

Thus localities, which in the past had few risks from natural disaster agents, are now vulnerable to toxic chemical spills, explosions, and fires, if they have any roads, railways, or navigable waterways. We have acquired the risks associated with nuclear power. If the worst of scenarios had developed at Three Mile Island, it is conceivable that precautionary steps would have been necessary in Philadelphia and other eastern metropolitan areas. The blackout of 1965 in the northeastern United States suggests how in the modern world, whole areas of a country are vulnerable to electric grid system malfunctions. These examples of relatively acute types of disasters do not include the more slowly developing and diffuse types of disasters associated with hazardous waste such as that witnessed in the Love Canal and Times Beach incidents.

In addition to the newer threats imposed by chemical, nuclear, and electrical power system accidents or failures, technological advances bring additional complexities to old threats, new versions of past dangers, and intriguing future perils.

Thus fires in high-rise buildings, in combination with the highly combustible and toxic construction and furnishing materials we presently use, have brought additional dimensions to the fire threat. We have prevented people from being burned by raising the probability of their being asphyxiated. The MGM hotel fire in Las Vegas was one example of what is likely to occur more frequently in the future.

Droughts used to be thought of as a rural problem. This is no longer the case. Now there is the possibility of urban droughts. Problems associated with urban drought surfaced in New York City as early as 1981. Had the situation run its full course, it would have been catastrophic for the entire metropolitan area.

Recently, national attention has focused on threats associated with the deteriorating physical and public works infrastructure of life systems in a large number of the older American cities. The prevalence of decaying bridge and tunnel systems, crumbling highways, obsolete and overloaded waste water and sewerage treatment facilities, and worn out water and sewer mains, suggests a variety of new, potentially disastrous kinds of possibilities. Not long ago a bridge collapsed in Connecticut. Given that 44.8 percent of the Nation's 566,443 highway bridges more than 20 feet long are structurally deficient or functionally obsolete, that collapse may well be a sign of the future. The recent bursting of one of the major water mains in Jersey City, New Jersey, gives an indication of what might happen if the collapse of one of the large tunnels or aqueducts bringing water into New York City were to occur.

Parenthetically, only the newer disaster agents or variations of old agents which pose new threats have heretofore been addressed. We have not examined the extent to which these disaster agents have created new risks or the global consequences of their overall effects in the modern world. The malfunctioning of computer systems resulting from a variety of potentially destructive agents presents the probability of unforeseen consequences on financial institutions. For example, a major earthquake in California could result in the shutting down of banks and other financial institutions within the state due to the interconnection of computer systems servicing the total banking system of the United States.

The point to be emphasized is that we will have more disasters in the future than in the past, and that their effects, at least so far as social disruptions and economic or property losses are concerned, are likely to be greater than before. This is assured by the new technological disasters we have created for ourselves, along with the complications or variations we have added to the new threats in urbanized and industrialized societies. Given this to be true, disaster preparedness planning should look more towards the future than the past. Unfortunately, there is a tendency in disaster preparedness planning to use past and limited experience as a basis for developing guidelines for the future.

There is nothing new about disaster preparedness planning. The Book of Genesis provides a vivid description of Noah and his ark. Mythical or real, the description of Noah's activities in anticipation of a great flood is perhaps the first recorded account in the Western World of disaster preparedness planning. There were some unusual features associated with the disaster. For example, the warning source might be perceived as being more legitimate and more reliable than the United States Weather Service. But otherwise, the account depicts many of the elements which might be involved in preparedness planning, namely: (1) advance warning of a population; (2) stockpiling of needed resources; (3) establishment of priorities relative to what should be done; and, (4) evacuation of people by family units to a place of safety.

While there is nothing new about planning for disasters, there is a major discernible difference between present-day and past preparedness planning. For the last three or four decades, preparedness planning has been able to draw upon a body of social science research on human and organizational behavior during disasters. In the last 30 years, social scientists (e.g. sociologists) have conducted hundreds of studies of how people, organizations, communities, and societies prepare for, respond to, and recover from natural and technological disasters. Results of such studies have provided a wealth of reliable knowledge about social behavior under extreme collective stress situations known as disasters. Given this knowledge, the opportunity now exists to prepare better for disasters than was possible in the past.

THREE THEMES ABOUT DISASTERS AND PLANNING

The discussion that follows is organized around three themes about disasters and planning which are derived from social science research.

THEME 1: DISASTERS ARE QUALITATIVELY DIFFERENT FROM SMALLER EMERGENCIES

Disasters have been found to be qualitatively different from smaller emergencies. A disaster is not simply a large-scale accident or emergency. Ironically, to plan on the basis that there is only a difference of degree involved, is to increase the possibility that a minor emergency will be turned into a major disaster.

THEME 2: PREPAREDNESS PLANNING CAN BE NO BETTER THAN THE ASSUMPTIONS IT MAKES ABOUT HUMAN AND ORGANIZATIONAL BEHAVIOR UNDER STRESS

Preparedness planning can be no better than the assumptions it makes about

human and organizational behavior under extreme stress. If planning is bad, it can be worse than no planning at all. Regrettably, because of incorrect assumptions, there is a good deal of poor disaster planning.

THEME 3: PLANNING CAN MAKE A RELATIVE, ALTHOUGH NOT ABSOLUTE, DIFFERENCE IN DISASTER PREPAREDNESS

Social science research shows that planning can make a relative, although not absolute, difference in disasters. However, such planning can be good, only if: (1) planners take into consideration a very broad range of activities; (2) an appropriate knowledge base is used in the planning process; and, (3) there is a recognition and acceptance of identifiable principles of planning that are applicable to all disaster situations. Unfortunately, all too often, planning is equated with using common sense or very limited experience when writing disaster plans for specific disaster agents.

The discussion that follows will expand on these three themes and their implications for disaster preparedness planning.

THE NATURE OF DISASTERS

Much so-called disaster planning is undermined or weakened by a failure to correctly grasp what is involved in a disaster. It is often mistakenly assumed that a disaster differs only in degree from an accident. Thus, many see disasters as merely large-scale accidents.

On a daily basis, almost all organizations learn to deal with minor emergencies. For some organizations, as for example, the public utilities, fire and police departments, hospitals, railroads and airlines, and parts of the chemical industry, such responses to accidents are a normal part of their everyday activities. Often these organizations have highly skilled personnel who have become quite adept at dealing with minor crises. Unfortunately, to paraphrase some police officers, this often leads to the belief that a disaster is merely a very large-scale traffic accident. A recent nation-wide study of acute chemical disasters was conducted by the Disaster Research Center. Results of interviews with chemical industry personnel showed that it was their belief that preparedness planning for acute toxic releases, chemical explosions, and other such mishaps was no more than an extension of everyday corporate health and safety measures. In another study of the delivery of emergency medical services (EMS) in large mass casualty situations, results of interviews with EMS personnel showed that it was their belief that special preparedness planning was unnecessary because the provi-

sion of EMS in disasters was but an extension of EMS in daily operations, the only difference being one of degree.

These and similar views, often strongly voiced, are simply wrong. In a disaster there is a difference of kind, not just degree, compared to what goes on in an accident or minor emergency. A disaster involves not just more, but something which is qualitatively different. This has to be considered when planning for disasters, training for disasters, operating under disastrous conditions, and evaluating group or organizational activity during such crises. An accident cannot be perceived as a little disaster, nor can a disaster be viewed as a big accident!

This is not merely a distinction that has come out of social science research. Some organizations and communities also recognize that such differences exist and have developed standard operating procedures (SOPs) to cope with crisis situations. For example, in most localities, public utility companies in this country carefully distinguish between: (1) accidents or emergencies (e.g. everyday, localized breakdowns which can be handled by local resources and personnel); and, (2) disasters and catastrophes (e.g. statistically rarer events which require external aid because local resources cannot cope with the acute demands). Many public utility companies typically recognize a "qualitative difference" between emergencies and disasters. Anyone having the responsibility of planning for or responding to such phenomena should also recognize and accept this fact that such differences do exist.

DIFFERENCES BETWEEN DISASTERS AND MINOR EMERGENCIES

The following four examples illustrate major differences between disasters and minor emergencies:

1. During disasters, organizations are forced into more and different kinds of interactions with other groups. The greater the number of contacts among organizations the more new relationships with other groups or organizations will be established. For example, businesses may be required to interact with social service agencies for the first time during crisis periods. In addition, local private groups may be required to coordinate their activities with remote and/or unfamiliar governmental bureaucracies. The converse is also true; however, often prior to the disaster, neither knew of the others' existence.

Conversely, during periods of normalcy, new relationships between organizations often develop very slowly. There is seldom a need to suddenly and concurrently establish linkages with multiple groups having local, State, and regional, and/or national components. During a disaster, however, there is little time available to adjust, for example, to the blurring of interorganizational boundaries, or

the informal sharing or pooling personnel, tasks, and equipment -- common features of major disasters, but not minor emergencies. Complicating such situations of greater interdependence is the number of new groups with varying functions, capabilities and expectations that will be involved. Even a relatively moderate size disaster will force dozens of unfamiliar local and extra-local organizations to work together on unfamiliar or new tasks that are a part of the community response network. In short, disasters call for more and different organizational relationships.

2. During disasters, organizations will lose some of their autonomy (e.g. direct control over their own functioning). In our society, when a community's ability to function normally is seriously threatened, security and protection from life-threatening situations usually becomes the responsibility of civil authorities. The mayor, the police chief, the head of the local disaster agency, or some other official, can declare a "state of disaster" and initiate measures to control disaster-related activities in a given locality. Although there are many stories to the contrary, it should be noted that martial law or rule has "never" been declared in American disasters and is extremely unlikely to ever be imposed. Civil control over the military is maintained even during disasters.

As a direct result of the loss of organizational autonomy, daily activities which are taken for granted become problematical during a disaster. The freedom of mobility within the community, as for example, entering or leaving one's property, may be restricted by police barricades or an evacuation order. During disasters involving chemicals, site control may actually be vested in an outside agency such as a State or regional hazardous materials response team, or a Federal agency such as the Environmental Protection Agency. Additionally, corporations or other authorities will often intervene during disasters and assume responsibilities, make decisions, or set policies which normally would be the sole prerogative of the local plant, office, or operation. In short, organizations can have their autonomy preempted in disasters in a way which will not occur during minor emergencies.

3. Performance standards for organizations may change drastically during disasters. What is appropriate during periods of normalcy or minor emergencies often becomes less relevant during crisis periods.

For example, standard operating procedures for fire service professionals require a swift response to emergencies involving structural fires. These procedures are followed by both public or private fire service organizations on a daily basis. However, firefighters respond quite differently to fire-related emergencies involving unidentified chemical substances or materials whose properties are not thoroughly understood. Often, delaying the response until the situa-

tion is clarified is the standard daily operating procedure under such circumstances.

Using daily performance criteria as a basis for determining the type(s) of response(s) required to control chemical incidents, some fire departments often turn minor chemical incidents into major chemical disasters. Similarly, EMS professionals have adopted standard operating procedures that emphasize quick response time and swift delivery of patients to hospitals. However, when handling large numbers of casualties, such routine operations are preempted by special procedures, as for example, the triaging of victims and the judicious transportation of injured persons to area hospitals to avoid overcrowding of emergency rooms and other risks associated with delays in emergency medical care due to overloading of hospital staff and substandard medical care.

Thus, performance criteria used during daily routine operations yield to the adoption of disaster performance criteria during crisis periods. As is the case when fire professionals are faced with crisis situations under conditions of uncertainty, EMS systems that use daily performance criteria as a basis for determining the actions that should be taken during crisis situations have resulted in inadequate and inappropriate responses to mass casualty incidents. Under the pressure of increased disaster-related demands, emphasis on speed of response and "snatch and run" procedures are not appropriate response strategies. In summary, disasters call for different types of organizational performance than do minor emergencies.

4. An emergency is often managed by an organization (public or private) having responsibility or authority to effectuate an emergency response to deal with the situation, or is managed by local organizations such as the police and/or fire department. Under emergency conditions, the crossing of boundaries among public and private sector organizations is seldom required. However, during disasters, a more cohesive relationship among public and private sector organizations is required. Thus, a disaster requires the mobilization of public community resources and often requires the preempting of some private rights by public rights. For example, unrestricted entry onto private property, which is normally very limited on a daily basis, is permitted under disastrous conditions. Also, under disastrous conditions, the destruction of selected private property for the good of the larger community (e.g. the construction of levees) is permissible without negative consequences.

Although legally questionable, the requisitioning of private goods and/or equipment for the public good is an acceptable practice during major disasters. Such actions are not necessarily restricted to the public requisitioning of private goods. It is to be noted that essential personnel and resources from the private sector are often freely offered for the public good at the height of a disaster.

Under disastrous conditions, there may in fact be private expectations and demands for goods and services from the public sector which would not otherwise occur during periods of normalcy. Thus, boundaries between public and private goods and services become blurred during disasters.

To summarize, during disasters, organizations are often faced with a whole new set of circumstances with which they must cope. As previously discussed, organizations may have to: (1) quickly relate to more and different groups and other organizations; (2) adjust to losing a part of their autonomy; (3) apply different performance standards; and, (4) operate within a closer public and private sector interface.

For these and other reasons, it is ill-advised for organizations to use daily performance criteria to meet the demands of disastrous situations. To function efficiently and effectively, organizations must be knowledgeable about the social environment within which they must operate during crisis situations. Furthermore, organizations must recognize that during crisis situations the environment changes quickly and drastically and that their disaster preparedness planning and response strategies must give consideration to this important fact.

PREPAREDNESS PLANNING ASSUMPTIONS

Preparedness planning can be no better than the assumptions made about individual and organizational behavior during disasters. Unfortunately most preparedness planning usually takes place on an ad hoc basis and/or is based on the most recent limited disaster or minor emergency experience of the organization or community. The planning, therefore, is not based on any systematic knowledge about behavior in disasters.

This would pose no problem if, for example, the common sense notions and assumptions made about disaster time were valid. However, social science studies in the last decade have seriously questioned common expectations about disasters. In fact, such research has consistently shown that many popular views about disaster behavior are inaccurate. Obviously, any preparedness planning which is based on incorrect assumptions about anticipated behavior during disasters is not good planning.

Preparedness planning assumptions must be correct if valid planning is to occur. The following discussion analyzes key assumptions about: (a) individual or human behavior under stress; and, (b) group or organizational behavior under stress.

1. Individual or Human Behavior

Typically, community officials and organizational planners with either limited or no disaster experience, invariably characterize individual or human behavior as that which results in personal chaos, social chaos, and pandemonium during disasters. Thus, there is the belief that there will be panic flight, hysteria, and other irrational actions. Likewise, it is believed that there will be social disorders, frenzied crowd behavior, and other antisocial actions. Other assumptions are that: (1) victims will be dazed or stunned and therefore unable to help themselves; and, (2) local human services organizations or emergency management agencies will be unable to function because their employees/members will be primarily involved in saving either themselves or their families.

Thus, the projected image of individual or human behavior during periods of crisis (e.g. disasters) is one of panic, antisocial behavior, and passive dependency on outsiders. When projecting the impact(s) of physical destruction on human/individual behavior during a disaster, planners often assume that physical destruction is accompanied by psychological and social disorganization. Hence, it is presumed that as the physical world collapses, the social and psychological world of victims also collapses.

The aforementioned expectations of human behavior under extreme community stress are widely diffused, largely immune to the contradictions sometimes offered by direct personal experience; and, arbitrarily included in disaster plans. Studies have shown that both the general public and community officials anticipate considerable individual breakdown and social pathology during disasters.

When a direct personal experience contradicts the expectation, it is either dismissed as an exceptional situation or attributed to the presumably unique qualities of the particular community or specific population involved. Much disaster planning and even response patterns implicitly, if not explicitly, assume that helping organizations will have to function in a situation characterized by panic, antisocial behavior and dependency by the victims.

Were we to examine the three common expectations addressed above and compare them with reality, we would find that in a typical disaster there is relatively controlled behavior, order, and personal initiative. Mythology notwithstanding, people generally do not exhibit antisocial behavior during and after disasters. Rather, they frequently rise to the occasion and deal rather effectively with the personal challenges presented by the disaster.

There may be expectations of panic, but what almost always occurs is rational behavior. For many reasons, including the influence of the mass media, many community and organizational officials believe

that people will panic when faced with great threat or danger. Presumably, this panic manifests itself as hysterical breakdown, aimless running, or wild flight. Furthermore, it is presumed that people cannot be depended upon to react intelligently and unselfishly in situations of great personal danger. This is simply not the case!

Generally, people do not panic in community disasters. However, under unusual circumstances (e.g. limited access to escape as may occur in a nightclub fire or a plant explosion), they may flee in panic. Actual instances of hysteria and/or wild flight are extremely rare. However, when such irrational behavior does occur it is of no practical or operational importance. Instead of fleeing from the disaster area, people will more than likely converge upon the impacted area and immediately do what they believe needs to be done.

Disaster victims are usually quite frightened, but this does not mean that they will act selfishly or impulsively. They do not become irrational, but instead (one could argue) they tend to show greater rationality under stress than they do normally, if by rationality we mean the conscious weighing of alternatives in performing most of our daily routine functions.

Similarly, there may be expectations of disorder, but what appears is a great deal of prosocial instead of antisocial behavior. To inexperienced officials and journalists, community disasters are viewed as agents that provide the opportunity for surfacing antisocial behavior. It is often speculated that deviant behavior will emerge, and that dazed victims in the disaster area will become easy targets for looting and other forms of criminal activity. The scenario is that as Mr. Hyde displaces Dr. Jekyll, crimes will increase and exploitative behavior will spread.

This is also a misconception, especially within those communities where widespread stealing and other criminal behavior are not normal everyday occurrences. Many rumors of looting will circulate, but actual reported instances will be rare.

If looting does occur, it will be done by outsiders rather than members of the impacted community. Under very exceptional circumstances, as for example, a general crisis such as the second major blackout in New York City, conditions for the emergence of localized rioting can emerge if no genuine threat to safety or survival is perceived. However, during a typical disaster, the mere volume of material goods that will be donated far outweighs that which could conceivably be looted.

In actuality, prosocial rather than antisocial behavior is a dominant characteristic during the height of a disaster. Crime rates usually drop. Exploitative behavior is most likely in relatively

rare instances of profiteering after the immediate emergency period is over. If disasters unleash anything, it is not the criminal in us, but the altruistic.

There may be expectations of dependency, but what develops instead is considerable self- and small-group initiative. There is a tendency to assume that community disasters leave large numbers of people dazed, shocked, and unable to cope with the new realities of the crisis. The assumption is that survivors are so disoriented and demoralized that they will need outsiders to provide the most rudimentary services such as food, clothing and shelter. If the previously discussed expectation is based on a Dr. Jekyll and Mr. Hyde view of human beings, the expectation of dependency is based on a "Big Brother" image. If "Big Brother" does not intercede it is assumed nothing will happen.

This expectation is also quite false. Those who experience disasters are not immobilized by even the most catastrophic of events. Neither are they devoid of initiative nor passively expectant that others, especially outsiders, will take care of their needs. Usually before the full impact is over, search and rescue efforts are initiated by neighbors, and the injured are attended to. Shelter is actively sought and offered by relatives and friends. In fact, the evidence is substantial and consistent that far from seeking and depending upon existing relief and welfare organizations for assistance, these are the last resources that the vast majority of victims will approach for immediate help. In a community disaster, the self-help, mutual-aid, and assistance provided by relatives, and other informal support systems stands out.

Disasters obviously cannot make everyday social pathologies disappear. If a group in the "pre-impact period" contains a large percentage of disoriented individuals, is permeated by a high degree of routine stealing and antisocial behavior, or is besought by bitter cleavages and conflicts, the same scenario will exist during mass emergencies of a disastrous nature. Thus, if civil strife exists in a society, the differences will continue to manifest themselves during disasters although there may be a very temporary suspension or reduction of conflict. If it is generally not safe to leave goods unattended in a neighborhood or community during non-disastrous periods, they will not suddenly become safe during a catastrophe, except perhaps at the very height of the emergency. Past behavior is still the best predictor of future behavior. The point to be emphasized is that a disaster does not in itself markedly increase social disorder, pathology, or conflict.

What does increase, however, are the relevant resources which victim populations can potentially provide. The reason for this is simple. Disasters free people from work, household, and school demands and/or the performance of daily tasks and responsibilities. If properly

planned for, victims could therefore be mobilized to help meet emergency community needs. In the aftermath of most community disasters, there is a varying pool of unused and available physical labor. The personal skills and knowledge that victims have are not destroyed by disasters and could also be utilized. Local people have vast amounts of information about their neighborhood which could be relevant in effecting an efficient and effective disaster response. In short, victims provide a large reservoir of human, material, and social resources that are potentially usable in disastrous situations. Unfortunately, this potential is seldom given serious consideration during organizational or community disaster planning.

The preceding statement is not intended to romanticize what victims can accomplish or to downgrade the role of disaster organizations. There are many life-saving services victims cannot provide. Neighbors might find victims in a search and rescue effort, but they cannot give blood transfusions or perform surgery. Similarly, activities such as clearing major debris, building temporary bridges, testing for water contamination, and restoring electric power are not tasks that individual victims or small groups of neighbors can perform very well. Furthermore, many tasks, such as assigning priorities for emergency actions, organizing transportation for massive post-impact evacuations, planning for and coordinating relief assistance provided by persons/organizations outside of the community, conducting surveys to assist in making decisions surrounding recovery measures, etc., are of necessity organizational responsibilities involving collective group action. They cannot result from either the initiative or actions of single individuals, clusters of isolated persons, or small groups of private citizens.

Thus, in no way do we underestimate the vital part human services organizations play in disasters. However, this should not lead us to ignore the fact, as is sometimes the case, that victims can help themselves and others considerably, and that the organized responses of helpers sometimes magnify and compound the difficulties created by disaster agents.

2. Group or Organizational Behavior

While individual victims frequently rise to the challenges presented by community disasters, human services organizations often stumble. In some ways, organizations are inherently less adaptive to disasters than individuals or small groups. The problem is compounded during community disasters because the required responses cannot be coordinated or managed by a single organization engaged in routine operations. Instead, there is a convergence of many organizations which must improvise considerably as they perform necessary tasks. Appropriate planning can markedly improve the efficiency and the effectiveness of such organizational responses, but cannot eliminate

the inherent problems.

ORGANIZATIONAL PROBLEMS IN COMMUNITY DISASTERS

There are also misconceptions about group or organizational behavior during disasters. Many problems thought to be typical, such as the loss of internal organizational control, very rarely occur. But other problems which frequently surface in disasters are usually either not predicted or underestimated, such as the difficulty of assigning authority for new disaster tasks.

There are three general, yet recurrent, organizational problems associated with community disasters that are a direct result of the proposed response. Although these three problems do not encompass the full range of difficulties associated with organizational responses to community disasters, if our research is valid, they are the major problems. The discussion that follows addresses organizational problems associated with: (1) the communication process; (2) the exercise of authority; and, (3) coordination and control.

1. The Communication Process

The term "communication process" is used deliberately to emphasize that this problem generally involves what is communicated rather than how communication occurs. In most cases, although admittedly not all, communication problems do not necessarily arise from equipment scarcity, damaged facilities, or other forms of destruction that result in rendering the equipment inoperable. Occasionally during community disasters the existing means of communication is already limited. Thus, problems that arise are directly attributable to pre-disaster equipment scarcity rather than to a disaster-related loss. In the majority of cases, problems related to the means of communication are far less than those arising from the process of communication. That is, some physical mode of communication will exist; however, resultant problems arise from the improper use of existing equipment or decisions to not use the equipment. Thus, communication problems are more the result of human or social error than equipment failure.

Organizational problems associated with the communication process are evident in at least five different categories of organizational behavior:

- Intra-organizational;
- Between organizations;
- From organizations to the public;
- From the public to organizations; and,
- Within systems of organizations.

The discussion that follows examines both the mythological beliefs and the real problems of organizations in community disasters and indicates how false assumptions about organizational behavior underlie, and thus invalidate, disaster preparedness planning.

A. Intra-Organizational Communication

Organizations have to communicate internally and constantly exchange information among group members. Under normal conditions, the communication system is designed to process and exchange predetermined types and quantities of information. However, during a disaster, the number of staff using the communication system increases greatly. This is created in part by internal staffing changes undertaken by the organization to meet the demands of the crisis situation. For example, double shifts may be required or volunteers may be incorporated into the work force. Often, the existing communication system cannot accommodate the volume of information required by system users. When the extra demands upon the internal communication system exceeds its capability, this results in "overload," the net result of which causes either system failure or results in the loss or delay of information to, from, and among staff members.

Communications are supposed to go through certain channels. In non-crisis situations, the flow of information follows the organizational chain-of-command. Thus, system user information needs, conditions under which information is to be exchanged, and the flow of information from the top to the bottom and vice versa, are clearly defined. However, during a disaster, the channeling of information throughout the organization becomes more complex. For example, it is not unusual for: (1) several individuals to occupy a position previously held by one person; (2) officials to assume non-routine tasks; and/or, (3) officials to be reassigned to work in temporary emergency positions within the organization. These and other factors can lead to the creation of situations where the normal channels of communication are insufficient to insure that all relevant information will reach those group members who should be informed of organizational activities.

B. Communication Between Organizations

Difficulties may develop along a second dimension -- that of communication between organizations. The reasons for the occurrence of potential problems in this area are two-fold. First, in noncrisis situations, normal, routine contacts between organizations proceed on an informal basis. Officials

often communicate with persons with whom they are familiar, for example, acquaintances and/or friends. When a disaster occurs, changes in the organizational structure are created which call for the establishment of different types of relationships among organizations. These changes when coupled with other factors do not support an informal system of communication. New contacts must often be established and maintained with new individuals who occupy positions of authority within organizations where there had previously been no contact. Community emergencies typically precipitate new relationships among different organizations. This often requires staff members of some organizations to develop contacts with members of other organizations that were not required prior to the disaster. Given the pressures of the disaster situation, this is often difficult to accomplish. Communication between organizations will frequently not proceed under such circumstances.

C. Communication From Organizations to the General Public

A third category of problems are those associated with communication from organizations to the general public. One major source of difficulty is the inability of organizational personnel to clearly communicate life-saving information to the general public during crisis situations. Often, this results from the organization's inability to understand that what is meaningful information to organizational personnel is often not necessarily meaningful to persons in the endangered area. An official group within an organization will frequently gather detailed and general information about a disaster. Using this information, the organization will subsequently issue an official statement or instruction to the general public which omits the details of its findings and other relevant information. For example, an announcement advising people to leave a dangerous area may be stated as follows: "Evacuate X street or Y neighborhood." Though officials may well know the limits/boundaries of the endangered zones, the relative degree of safety in other areas, and other details, the aforementioned instruction may well be the sum total of information in the public statement. Thus, the public is often forced to ascertain the extent of the danger, what is required of them during the evacuation, and where it might be safe to relocate. Hence, all too often, organizations which are well informed about events and potential threats assume that their public statements will be as clear to the endangered population as they are to members within the organization. This is a dangerous assumption!

D. Communication From the Public to Different Organizations

A fourth category of problems associated with organizational be-

havior under stress is communication from the public to different organizations. These problems not only arise after a disaster, but occasionally arise during pre-disaster periods. For example, frequently people will bombard organizations with requests for aid and information, will ask the more visible public groups what should be done, where to obtain certain things, and so forth. A frequent result is the inability of high visibility organizations to efficiently process large volumes of information. Typical is the effect of the flood of telephone calls to police departments when any untoward event occurs in a community. The police switchboard often becomes so overloaded with calls that all communication, both within and/or outside of the organization, is interminably delayed.

In addition to normal requests for aid and information, organizations must respond to requests for new information. Few organizations can effectively respond to non-routine questions. Consequently, persons assigned to man switchboards or complaint desks often find themselves unable to cope with the increased demands for new kinds of information during crisis situations.

E. Communication Within Different Systems of Organizations

Often overlooked are communication problems that arise as a result of the mobilization of different systems of organizations during community disasters. There is a tendency to think of organizations not as systems, but rather as components operating independently of each other. This is not the case. Often, there are sets or systems of interrelated, specialized, organizations that are designed to perform particular disaster-relevant tasks.

Thus, there are medical systems delivering emergency medical services, while police and/or military systems provide security. The accomplishment of these and other disaster-relevant tasks involves far more than one-way communication among participating organizations. Rather, there are multiple two-way and chain communications between different kinds of multi-layered groups. In a medical system, there may be several first aid stations, ambulances or transporting units, primary and secondary hospitals (both public and private), and segments of different authorities operating within diverse jurisdictions. Although communication within an organizational system is difficult during nonstressful periods, it can and often does become quite problematic during a community disaster, especially since there is an emergent quality in the behavior of many systems at such times.

Generally, problems in the area of organizational communication are the most serious ones. If difficulties in this area are

not solved or at least partially mitigated, there is no great need to worry about other kinds of problems. Rapid and accurate communications are essential core ingredients of any effective and efficient organizational response to disaster. The absence of these attributes results in inappropriate or inefficient responses to other problems.

2. The Exercise of Authority

Disasters require that some agencies and officials assume responsibilities, make decisions, and be seen as legitimate. Naturally, if the exercise of authority is weak during nonstressful periods, it will prove even weaker when disaster strikes. If authority is weak in the first place, as is true, for example, in many county governments in the United States, it can completely disappear when disaster strikes. However, even if we assume that the exercise of authority among agencies and officials during periods of normalcy are operating properly within a community, there will be problems during the emergency phases of disasters. The difficulties which surface, however, are often not those commonly anticipated.

Thus, the chain-of-command and lines-of-authority do not break down in established organizations. If inadequate communication does exist during a mass emergency, officials usually continue to exercise their formal authority and fulfill their normal duties and responsibilities. If higher-echelon officials cannot be reached, personnel at the middle and/or lower echelons often make decisions they do not normally make. Even rigid bureaucracies will bend on this matter when faced with clear-cut crises that require an immediate organizational decision or response.

A common belief is that organizations may be unable to function effectively due to a conflict between the work role and the family role of officials. Occasionally expressed is the fear that important officials or key personnel will either not report to work or will leave their jobs when disaster strikes because of a concern or a need to take care of their victimized families. Research has shown that this so-called role conflict does not result in the abandonment of, or failure to carry out, occupational responsibilities. (At least it is not a major problem especially in the higher echelons of organizations, e.g., those positions carrying the most authority.) It is clear that officials can be expected to do their jobs, although there is psychological strain for those caught in such a role conflict.

Neither are there many problems arising from questions concerning which organizations have been delegated the authority and responsibility to perform traditional tasks during periods of disaster. Thus, there are seldom disputes or questions concerning who fights fires, repairs telephones, performs major surgical operations, or

other specialized tasks. Such matters are the traditional responsibility of certain local groups. A disaster is unlikely to alter the normal pattern.

On the other hand, there are at least four problem areas involving organizational authority in community disasters: (1) loss of higher-echelon personnel because of overwork; (2) conflict over authority regarding new disaster tasks; (3) clashes over organizational domains between established and emergent groups; and, (4) surfacing of organizational jurisdictional differences.

A. Personnel Burnout

This problem stems from the strong tendency on the part of key officials in positions of authority to continue working too long. Such personnel who remain on the job around-the-clock during a disaster will eventually collapse from exhaustion or become inefficient in their decision-making and other areas of responsibility. More importantly, when such officials are eventually succeeded by others, their successors will lack certain information to exercise the necessary authority, because crucial data will not have been formally recorded. Decision-making requires relevant knowledge. Officials with the appropriate information will not always be physically capable of working beyond a certain point. If such officials occupy key positions of authority, the disaster response capability of the organization can be seriously impaired.

B. Organizational Authority Conflicts

Determining who has the organizational authority to perform new disaster-related tasks is another major problem. When there are new disaster-related tasks to be performed, questions almost inevitably arise about which organizations have the authority to assume them. For example, the responsibility or authority for performing large-scale search and rescue activities or mass burials of the dead are normally not everyday tasks of established emergency management agencies.

C. Organizational Domain Conflicts

Authority problems surrounding the performance of traditional tasks sometimes arise between established organizations and outside or emergent groups. For the most part, "area security" is considered a traditional local police function. Conflicts can arise if state police or military personnel move into the disaster area and also attempt to provide security. Such actions are often viewed by the local police as an attempt to usurp their authority. The issue is sometimes manifested in disputes over who has the right to issue passes allowing entry into a restricted impacted zone.

The situation is even more complex when the competing organization is an extra-community group or an emergent group, as for example, when nonlocal relief or welfare agencies provide services during a community disaster. Though they may be exercising their mandated or usual function of providing standard services, such agencies are frequently viewed as intruders into the domain of local agencies while performing such functions. If the outside or local relief group is a new organization, established local agencies undertaking the same disaster task(s) are almost certain to ask questions about its legitimacy and authority.

D. Organizational Jurisdictional Differences

Community disasters frequently cut across jurisdictional boundaries of local organizations. This creates a great potential for conflicts. During non-crisis periods, vague, unclear or overlapping authority and responsibility can often be ignored. During disasters this is frequently not the case. Since disasters sometimes require immediate actions and decisions, unresolved jurisdictional issues often surface at the height of an emergency period.

Problems of authority are especially difficult to resolve. In part, this is because the question of organizational authority involves the whole fabric of formal and informal power within a community. This is a subtle and sensitive matter full of pitfalls for anyone not knowledgeable about the nuances of local history. Therefore, it is not surprising that such problems are difficult to plan for and equally hard to handle when they arise.

3. The Development of Coordination

Organizations experience a large number of coordination problems during a community disaster. Three major problems have been noted in social science research:

- Lack of consensus among organizations concerning the meaning of coordination;
- Strained coordination between organizations working on common but new disaster-related tasks; and,
- Difficulties in achieving overall communication in a community disaster of any magnitude.

A. The Lack of Organizational Consensus

It is unusual to find any organization which does not agree, in principle, that coordination is needed during disasters. The problem, however, is that "coordination" is neither self-explanatory nor a matter of much consensus. At one extreme, some organizations view coordination, at best, as informing other groups of what they will be doing in the disaster. At the other extreme, some organizational officials see coordination as the centralization of decision-making in a particular agency or among a few key officials. Given such diverse views surrounding the meaning of coordination, it is not surprising that even when a formal pre-disaster agreement to coordinate the disaster response exists, there can occur mutual accusations that one or both parties have failed to honor the agreement. But prior agreement or not, in the absence of an explicit understanding of what coordination means in operational terms, there will be organizational coordination problems. It is rare to find such an explicit understanding in community disaster planning.

B. Strained Organizational Relationships Created by New Disaster Tasks

Coordination (i.e., mutually agreed linking of activities of two or more groups) between organizations working on common but new tasks is also difficult. Even local agencies that are accustomed to working together, such as police and fire departments, may encounter difficulties when they suddenly try to integrate their activities to accomplish a novel disaster task, such as the handling of mass casualties. While police and fire departments may be accustomed to recovering a few bodies resulting from traffic accidents or fires, the large number of deaths resulting from a major disaster will pose a coordination problem. It is partly the newness of many disaster tasks which create strained relationships among organizations which had previously worked together in harmony. Also, in daily operations there can be a gradual development, frequently on a trial and error basis, of a working relationship between two groups concerned with the accomplishment of a common goal. Such leisurely developments of cooperative relationships are generally an impossibility given the immediate demands during the emergency phase of a community disaster.

C. Impact of Disaster Magnitude

The larger the scope of the disaster and the greater the number of responders, the less is the likelihood of success of any overall organizational coordination. In fact, efforts to attain

such coordination underlie the imposition of martial law or the designation of national military forces as the decision-makers during the disaster. Historically, neither event has ever occurred in the United States, although both are relatively common response measures undertaken during catastrophes in both developed and developing countries. These steps do not always produce overall coordination. This is understandable. In almost any society a major community disaster will precipitate a mass convergence of nonlocal organizations upon the disaster site. The numbers involved, the different levels of the social structure which they represent, heterogeneous mix of public and private organizations involved, and so forth, virtually assure the impossibility of achieving any overall coordination during the emergency period. As shall be noted later, good disaster planning may effectively reduce the convergence of such organizations and thus allow a relative degree of overall coordination. But such coordination remains relative at best and is frequently never achieved -- either by prior planning or by the use of ad hoc efforts -- during the emergency period. The magnitude and increased frequency of new tasks to be performed coupled with the need to integrate too many established, emergent groups and organizations minimizes the effectiveness of organizational coordination during disaster situations. Some former military personnel involved in natural or technological disaster planning suffer from the illusion that the command and control system that exists for limited wartime military emergencies -- at least in the abstract -- can be imposed upon a major civilian disaster situation.

It is to be noted that the evaluation criteria used to judge the consequences of not achieving total organizational coordination determine to a large extent the significance of coordination in promulgating an effective community response to disaster.

If efficiency of response is rated highly, lack of coordination can be deemed a serious problem. If, instead, effectiveness of response is judged more important, it is possible to tolerate a much lower degree of overall coordination. Coordination is sometimes discussed as if it were an absolute necessity and/or an absolute good. This is not true. There can be relatively effective organizational responses in disasters without a high degree of coordination.

We have stressed the basic, and often inherent, nature of the problems which emergency management and human services organizations typically encounter. In a community disaster, there will be unavoidable organizational communication, authority, and coordination problems. Emergency response organizations will be both the source and the focus of these difficulties. Thus, the collective efforts of community-based organizations generate many problems that usually exceed those caused by the disaster victims.

DISASTER PLANNING

If the discussion were discontinued at this point, several true but incomplete statements about the realities of the behavior of disaster victims and emergency organizations would have been made. Victims are potential helping resources in a disaster situation because they are generally not as psychologically and socially incapacitated as mythical beliefs imply. Organizations are probable sources of many major problems because of the intrinsic nature of what is required in an organized response to disasters. However, victims can only become resources if appropriate planning is undertaken. Additionally, organizations will have major problems only if there is no planning at all. Planning can maximize the effective utilization of available resources and reduce problems!

There are, of course, limits to preparedness planning. Victims can be used as resources and organizational problems can only be reduced up to a point. Disaster planning is no panacea or ultimate solution for everything which occurs in a disaster. This statement runs counter to the expectations of some planners who implicitly seem to promise everything if extensive planning is undertaken. However, because disaster planning cannot achieve everything does not mean that it is not beneficial.

Acceptance of the benefits of planning is one thing, however, the actual implementation of good disaster planning strategies is quite another. There are many reasons for these differences. There is a tendency for disaster planners to not:

- Use the best available knowledge base;
- Recognize what planning essentially involves; and,
- Willingly acknowledge that there are principles of planning.

The discussion that follows analyzes how each of the aforementioned problems negatively impact the development of effective disaster plans.

A. Disaster Planners and Organizational Problems

Planning for disasters can be no better than the knowledge base from which it is derived. Too many officials and personnel in emergency management organizations accept planning in principle, but do not or cannot recognize the fact that they do not approach it using the best possible knowledge base. Planning cannot be based solely or primarily on common sense notions. As discussed earlier, many popular views incorporate myths about human behavior under extreme stress. For example, social science research has found that because the image of victim-dependency is so wide-spread, considerable organizational effort

is expended on planning mass shelters which will not be used (except under exceptional circumstances), since victims seek and are given sheltering assistance by friends and relatives.

It is also not possible to adequately prepare for disasters or minor emergencies solely on the basis of one or two personal experiences! There are dangerous limitations to such an approach. Organizational officials are unlikely to have direct personal experience with very many disasters. Thus, any idiosyncratic features of a particular disaster may be mistaken as universally characteristic of all disasters. There is also a tendency to make broad generalizations based upon personal experiences with one or a few disaster agents and to apply these generalizations to the full spectrum of catastrophes within the community. A major pitfall in this approach is that the sample size used is too small to support such extrapolations.

In addition, planners show a strong tendency to rely too heavily on past experiences rather than to make projections about what might happen in the future. It is often said that generals learn how to fight very well under the conditions presented by the last war, but not an upcoming one. The same can be said of some disaster planners. They learn well how to cope with the last disaster they encountered, but are vulnerable to the newer or different kinds of disasters and threats mentioned earlier.

Additionally, due to the lack of a broad perspective, it is not always possible to derive meaningful lessons from personal experiences. For example, rather than recognizing a perceived absence of panic as a general human tendency, often it is attributed to one's own unique stable qualities or the sterling (but exceptional) characteristics of the impacted population. Finally, it is never easy for organizational officials and personnel to make an impartial evaluation of the actions of their own group. Too often, after-action reports turn out to be post hoc defenses or justifications of what the agency did rather than a candid assessment of either the problems encountered or the mistakes made.

A general conclusion is that a direct personal or organizational disaster experience is less useful for disaster planning purposes than is often recognized. Before such experiences can be utilized, they must be seriously analyzed and their limitations explicitly stated. It is therefore possible for some officials within emergency management organizations to be involved in several disasters yet demonstrate by their actions that they learned very little. In essence, the events to which they refer are not conducive for deriving general principles. Just as military "war stories" contribute nothing to military planning strategy, disaster "war stories" are seldom useful in developing preparedness planning strategies.

The most adequate knowledge base for planning purposes is grounded in as wide a range of as many disasters as possible, involves a systematic and objective examination of what occurs, and attempts to draw general principles and theoretical models from the information available. This is what scientific research in the disaster area attempts. Until the last few decades, disaster planners could justifiably say there were very few social scientific studies which could be used. This excuse is no longer legitimate. There now exists a body of social scientific knowledge applicable to disaster planning. This monograph attempts to illustrate some of what is now known -- ranging from specific findings to general perspectives.

B. Conceptual Differences: Disaster Preparedness Versus Disaster Planning

A further impediment to developing good disaster planning involves conceptual differences among disaster planners which often lead to the adoption of too narrow a view of what preparedness planning involves. To many, the writing of a disaster plan is the essence of planning. This is not only incorrect, but actually can be a very dysfunctional position to take.

Disaster preparedness is not synonymous with the formulation of written disaster plans. A more useful perspective is to envision planning as "a process" rather than to perceive of it as merely the production of a tangible product. Viewed this way, preparedness planning involves all of those activities, practices, interactions, relationships, and so forth, which over the short term or long run are intended to improve the response pattern at times of disaster impact.

C. General Principles of Disaster Preparedness Planning

As viewed within the aforementioned perspective, disaster preparedness planning includes:

- Convening meetings for the purpose of sharing information;
- Holding disaster drills, rehearsals and simulations;
- Developing techniques for training, knowledge transfer and assessments;
- Formulating memoranda of understanding and mutual aid agreements;
- Educating the public and others involved in the planning process;
- Obtaining, positioning and maintaining relevant material resources;
- Undertaking public educational activities;

- Establishing informal linkages between involved groups;
- Thinking and communicating information about future dangers and hazards;
- Drawing up organizational disaster plans and integrating them with overall community-mass-emergency plans; and,
- Continually updating obsolete materials/strategies.

Thus while formal disaster plans are an element in disaster preparedness, they are best viewed as only one of numerous activities which should be undertaken to improve the efficiency and effectiveness of a community disaster response.

The creation of human resources or the reduction of organizational problems, which we discussed earlier, cannot be achieved just by writing a plan. For example, converting disaster victims into potential helping resources also should involve public education, training techniques, and so forth. Similarly, reducing the response-generated problems of organizations requires having meetings, holding drills, securing agreements on memoranda of understanding and taking other necessary actions as required. A range of activities have to be undertaken if the indicated objectives are to be achieved.

Writing formal disaster plans or using existing disaster plans can be dysfunctional. Such actions may lead emergency management organizations to think that they are prepared for a disaster merely because they have a formal written plan. Even worse, such actions often lead such organizations to ignore other critical activities that are absolutely necessary for developing good community disaster plans.

Findings for nation-wide studies indicate that some of the best preparedness planning exists in organizations and communities which do not have much by way of written plans. For example, the American Red Cross, Greater New York Chapter, has excellent disaster planning strategies, but has very little by way of a formal written plan. On the other hand, to obtain accreditation, hospitals are required to have written disaster plans. However, despite the existence of such documents in almost all American hospitals, disaster preparedness is seldom the strong point of many of these institutions.

Finally, good planning requires accepting the belief that there are principles of planning. Few would explicitly deny this. However, implicitly, even some emergency management organization officials think that every situation is unique and that, in a real sense, general planning is impossible. That is not a valid view. Every human being is somewhat biologically different from other humans. Nonetheless, the medical world, for example, has little difficulty in identifying general symptoms of illness, and specifying uniform treatment procedures. Similarly, each disaster is different, but a general approach is possible.

It can also be stated that different disaster agents and differences between communities will result in some differences in disaster responses. However, such differences are of lesser importance than the similarities which research studies have found. The military recognizes the diversity of combat situations and combatants. Nonetheless, they still argue that there are principles of military strategy. We should recognize the same is generally true of disasters. We need to accept the fact that there can be a planning strategy for all disasters.

What some refer to as the unique aspects of disasters are in reality uniquenesses endemic to disaster management rather than disaster planning. There is a difference between the two. Planning involves preparation, while on the other hand, management involves actually executing what the plan calls for or what the situation demands. Using the previously discussed military analogy, the strategy suggests the general approach but different tactics have to be applied in specific situations. Parenthetically, however, it should be noted that the military also argues for principles of military tactics in that they do not believe the singularity of every situation precludes the development of tactical principles. We should keep this in mind in thinking about the disaster area.

Studies have shown that disaster planning is better in some instances than in others. The best disaster planning follows or is organized around certain general principles. Earlier, eleven major principles of disaster preparedness planning were systematically discussed. The discussion that follows analyzes a few of these principles in more detail.

DISASTER PREPAREDNESS PLANNING SHOULD WORK AT ANTICIPATING PROBLEMS AND POSSIBLE SOLUTIONS

Disaster preparedness planning should work at anticipating problems and possible solutions. The contingencies are too many to anticipate all possibilities; however, good planning can indicate some of the major parameters of the situation. For example, we can incorporate into the planning process the perspective that disaster victims will take initiatives and will not be passive, or that helping organizations will have difficulty coordinating new tasks. Such an approach reduces the unknowns which have to be considered. It not only narrows the range of problems which need to be anticipated, but also lessens the number of alternative or optional solutions which have to be examined. If disaster victims do not markedly engage in antisocial behavior, for instance, there is little need to plan for a variety of security measures or the mobilization of many law enforcing agencies. On the other hand, if there

is always a degree of tension between local and extra-local organizations, be they in the public or the private sector, this should be recognized and addressed in preparedness planning.

DISASTER PREPAREDNESS PLANNING SHOULD STRIVE
TO EVOKE APPROPRIATE ACTIONS

Disaster preparedness planning should strive to evoke appropriate actions. At times, planning appears primarily as a mechanism for speeding up responses to crisis situations. It is true that good planning may allow a quicker response to certain disaster problems; however, quickness of response is a by-product rather than a major objective. Appropriateness of response rather than speed of response is far more crucial.

Accordingly, it is much more important to obtain valid information about what is happening than it is to take immediate actions. Reacting to the immediate situation may seem the most natural and humane thing to do, but it is rarely the most efficient and effective response strategy. The immediate situation is rarely that important in terms of both short-run and long-run consequences. Planning, in fact, should help to discourage impulsive reactions and to encourage the adoption of appropriate actions necessary to meet the challenges of the immediate situation. For example, planning should be directed at slowing down the convergence of helping organizations at a disaster site, thus reducing coordination problems.

DISASTER PREPAREDNESS PLANNING SHOULD BE BASED
ON WHAT IS LIKELY TO HAPPEN

Disaster preparedness planning should be based on what is likely to happen. Some planners seem more oriented toward conceptualizing the most ideal response-type situation imaginable rather than focusing on the realistic possibilities which will be present. This is unfortunate. It is far better to plan on the basis of how people and groups react during normal and emergency situations, than to ex-

pect them to change their behavior drastically during disasters. In short, planners must adjust their planning to include an understanding of people and their behavior under stress, rather than expect people to change their behavior in order to conform with the plan.

The principle is equally applicable to organizations. The great majority of people should not be expected to act and/or react much differently during a disaster than they would during periods of normalcy. For example, it is useless to assume that concerns over organizational domains or territories which prevail during normal periods will suddenly disappear during disaster periods. Disaster planning must be adaptable enough to include expected organizational behaviors, rather than try to force organizations to drastically alter their activities in order to meet the requirements of the plan.

DISASTER PREPAREDNESS PLANNING SHOULD FOCUS ON
GENERAL PRINCIPLES AND NOT SPECIFIC DETAILS

Another important principle of good disaster preparedness planning is that it should focus on general principles and not specific details. There is a tendency, whether in developing written plans, conducting exercises, thinking about possible hazards, etc., to elaborate considerably. In fact, there is a strong temptation to go into very specific details. This is the wrong way to proceed and there are several reasons why this is a poor path to follow. It is impossible to plan for everything. Situations are constantly changing and specifics quickly get outdated. Too many details leave the impression that everything is of equal importance when that is clearly not the case.

Complex and detailed planning is generally forbidding to most potential users and will end up being ignored. While disaster planning cannot totally ignore specifics, particularly at the organizational level, good disaster planning should be based upon the use of general principles from which simple rather than complex disaster plans are developed. But even apart from written plans, all disaster planning should aim at general rather than specific details. For example, within the context of previous discussions concerning problems surrounding

organizational coordination, good preparedness planning will consider the fact that during crisis situations, organizations with emergency response responsibilities will be working with new and more groups (both existing and emergent) and that the new and different kinds of relationships imposed by the crisis situation are unlike those that are required during periods of normalcy. However, during the planning process, no attempt should be made to specify all of the possibilities and intricacies associated with the scope or degree of inter-organizational contacts which might conceivably develop.

DISASTER PREPAREDNESS PLANNING ALWAYS INVOLVES TRAINING AND EDUCATION

The most important principle of good disaster preparedness planning is that it must include training and education as a key component. The basic point is that good preparedness planning always involves a degree of educational activity. It involves not only teaching one's self what is expected, but also teaching others what is expected of them. A frequent error in organizational disaster planning is that planners forget that they will have to orient, train or educate others (e.g., people and groups) relative to their respective roles under disastrous circumstances. Knowing the role/responsibilities of a few key officials and planners, or the organization, is not enough. The counterpart roles of others must be clear to facilitate coordination and an integrated disaster response. Of necessity, this requires teaching others what is or will be expected of them.

Other principles of good disaster preparedness planning are:

- Disaster planning must rest on valid knowledge and not myths or misconceptions.
- Disaster planning is a continuous process and not an action with a definite end such as the production of a written document.

CONCLUSIONS

In conclusion, the following briefly summarizes the major themes addressed in this monograph:

- Victims respond to the stresses of disasters much better than mythological beliefs would lead us to believe.
- Victims should be seen as possible resources in the organized response pattern.
- Helping organizations have many problems, although not always the expected ones.
- Some difficulties are inherent in the nature of social organization and are immune to total elimination.
- Planning can help transform victims into resources and reduce organizational problems so that the response pattern can be more effective and efficient.
- If disaster planning is to be effective, it must be appropriate planning, and as such, must be based on social science knowledge; must be seen as a process; and, must follow certain empirically-derived principles.
- Planning which does not incorporate these ideas is worse than no planning at all.

BIBLIOGRAPHY

1. Dynes, Russell R., E. L. Quarantelli and Gary A. Kreps. A Perspective On Disaster Planning. Columbus: Disaster Research Center, Ohio State University, 3rd edition. May 1981.
2. Dynes, Russell R., "Organizational Behavior in Disasters." Columbus: Disaster Research Center, Ohio State University. 1975.
3. Quarantelli, E. L., A 100-Item Annotated Bibliography On Disasters and Disaster Planning. Columbus: Disaster REsearch Center, Ohio State University. Miscellaneous Report #25. 1980.
4. Quarantelli, E. L. Disaster Planning: Small and Large -- Past, Present, and Future." Columbus: Disaster Research Center, Ohio State University. Article #141. 1981.
5. Quarantelli, E. L. and Russell R. Dynes. "Disaster Types of Organization in Disaster Response and Their Operational Problems." Columbus: Disaster Research Center, Ohio State University. Preliminary Article #41. 1977.

☆ U.S. Government Printing Office: 1986-623-119/00460